



Volume 3, Issue 1-12, Summer 2006

# Measure Up

Assessment news for twelfth-grade teachers

# **NAEP Results Show That...**

# Highlights of NAEP 2007

- Assessments will be conducted in grade 12 in writing and reading between January 22 and March 2, 2007.
- Results for twelfthgraders nationwide will be reported in spring 2008.
- Teachers in sampled schools will answer questions about their background, training, and instructional practices.

- Twelfth-grade students whose teachers had "very positive" **expectations for achievement** scored higher than students whose teachers had "somewhat negative" expectations.
- Twelfth-grade students who indicated writing long answers on reading tests at least once a week scored higher than students who wrote long answers on reading tests one to two times per year.
- Twelfth-grade students who **used a graphing calculator for math schoolwork** scored higher than students who did not use a graphing calculator. Sixty-one percent of twelfth-grade students reported using a graphic calculator for math schoolwork.
- Twelfth-grade students who at least sometimes were asked by their teachers to write more than one draft of a paper scored higher than students who were never asked to do so.
- Twelfth-grade students who spent at least 15 minutes per day on math homework scored higher than students who spent no time on math homework each day.
- Twelfth-grade students who **had a class discussion** about something the whole class read at least once or twice a week scored higher than students who did so only once or twice a month.
- The number of **course credits** earned by high school graduates increased throughout the 1990s.

82

Percent of twelfth-graders who agreed or strongly agreed with the statement, "Doing well in school is a goal of most students in my class."

## **Using NAEP in Your Classroom**

With the release of NAEP results, selected items from each assessment are also released. Teachers can access the items, answer keys and scoring guides, sample student responses and national performance results of twelfth-grade students using the NAEP Questions Tool at <a href="http://nationsreportcard.gov">http://nationsreportcard.gov</a>. The Questions Tool includes both multiple-choice and short and extended constructed-response items for all NAEP subjects and grades. Below, read about using a reading sample question. In future issues, sample questions from other content areas will be explored.

In 2002, twelfth-graders responded to questions about a speech by Newton Minow, chair of the Federal Communications Commission during the Kennedy Administration. After reading the "Address to the Broadcasting Industry," students responded to one multiple choice, six short constructed response, and one extended constructed response questions. The context for this passage is reading for information, which engages readers in aspects of the real world as they work to find specific information within the text.

The NAEP reading framework guides the development of questions for the reading assessment. The framework is adopted by the National Assessment Governing Board (NAGB) and is available at <a href="https://www.nagb.org">www.nagb.org</a>. The NAEP reading framework specifies that students are to respond to questions in a variety of contexts, such as reading for literary experience, reading for information, and reading to perform a task. For all student constructed response questions, students are asked to use information from the text to explain/support their answer.

In addition to contexts for reading, the framework also specifies aspects of reading that characterize the tasks that readers are expected to complete for each question, such as forming a general understanding, developing interpretation, making reader/text connections, and examining content and structure.

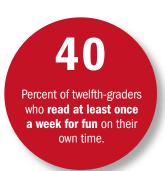
For example, one sample question in the Minow passage asked students: "Why did Mr. Minow refer to television as a 'vast wasteland'? Give an example from the speech to support your answer." Here, the reader must extend his/her initial impression to develop a more complete understanding of what he/she read, or "develop an interpretation." The process often

requires the student to link information across parts of a text. Questions that assess this aspect of reading may also require the student to draw inferences about the relationship of two pieces of information or provide evidence to determine the reason for an action.

A student response that demonstrated evidence of full comprehension for this question is, "He called T.V. a vast wasteland because there is hardly anything worth watching. He used bad game shows and Westerns as an example." A student response that demonstrated partial or surface comprehension is, "He is saying there is too much trash on the television." Scorers commented that the first response accurately explains why and provides an example. The scorers wrote that the second response does not provide supporting examples from the speech. For this question, 27 percent of students in public and nonpublic schools gave an answer that demonstrated full comprehension. Forty-eight percent of students gave an answer that demonstrated partial or surface comprehension.

Teachers can use released twelfth-grade items such as these in their classrooms. For example, a search of twelfth-grade reading items includes a series of questions titled "Tax Form." For this text, there are 15 questions which ask students to use the information provided on a 1040EZ form, tax tables and a sample W-2 form. Teachers could assemble a document for their students that includes the test questions as they appeared in the original assessment. Once students answered the questions, they could score their responses using the scoring guide provided by NAEP. By using a set of released items in the classroom, teachers can see how their students compare to students nationwide. To access all released items, visit <a href="http://nationsreport">http://nationsreport</a> card.gov and select "Sample Questions."





- To use released twelfthgrade items in the classroom, teachers should visit <a href="http://nationsreportcard.gov">http://nationsreportcard.gov</a> and select "Sample Questions."
- From there, teachers can select "Search Options," and then a subject and grade 12. A series of questions will appear, and teachers can select to review the questions, sample student responses, and performance data for students nationwide.

### **Prompting Writing**

In 2007, twelfth-graders will take the NAEP writing assessment. On the writing assessment, students are asked to write for a variety of purposes: narrative, informative, and persuasive. Students also write on a variety of tasks and for many different audiences. Various stimulus materials are used in the writing prompts. In 2002, some of the narrative topics

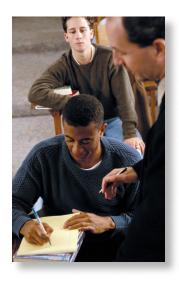
#### Sample Grade 12 Writing Prompt

"If you were told you could save just one book for future generations, which book would you choose and why?"

asked students to write stories in response to photographs, cartoons, or poems. Several of the informative topics asked students to respond to letters, cartoons, or articles. Many of the persuasive topics asked students to write in response to information provided in the assessment, such as newspaper articles, charts, photographs, and reported dialogues. In the 2007 twelfth-grade writing assessment, 40 percent of the prompts will be persuasive, 35 percent informative, and 25 percent narrative. There are 20 prompts used across the nation and in each school, although each student will respond to only two.

Each student participating in the writing assessment is given a brochure on planning and reviewing writing. The brochures offer numerous suggestions for getting started and revising writing. Students are also given blank pages in their assessment booklets for pre-writing.

To see released prompts from previous assessments, teachers can visit <a href="http://nationsreportcard.gov">http://nationsreportcard.gov</a> and select "Sample Questions."



Percent of twelfth-graders who agreed with the statement, "Science is useful for solving everyday problems."

# Grade 12 Science Performance Unchanged Since 2000

In 2005, a nationally representative sample of twelfth-graders took the NAEP science assessment. The national results were released on May 24, 2006. Overall, twelfth-graders' performance was unchanged from 2000; however, it was lower than in 1996. Compared with both 1996 and 2000, scores in 2005 for White, Black, and Hispanic students showed no significant change. The score gap between White and minority students and between male and female students did not narrow between 1996 and 2005.

Interesting facts emerged from the background questionnaire that the sampled twelfth-grade students answered. For example, a higher percentage of twelfthgraders reported taking both biology and chemistry in 2005 than in 2000, and fewer reported taking just biology or other science courses.

As with all NAEP assessments, some of the test items and student performance on these items are released.

#### Sample Grade 12 Science Question

"Mechanical weathering is the physical breakdown or disintegration of rocks without a change in composition. Briefly explain two ways that rocks can undergo mechanical weathering."

Overall, 23 percent of twelfth-graders gave an answer to the sample question above that was rated "Complete." An example of a student response rated "Complete" stated: "1) A rock that stays in the rain can be weathered by water running over it and 2) Wind can blow dirt and sand across rocks which over a long period of time will weather it."

To view complete results, all released items, scoring guides, and sample student responses, please visit <a href="http://nationsreportcard.gov">http://nationsreportcard.gov</a>.



#### Assessment Day Tips

- Encourage your students to do their best.
- Explain to your students that they are representing many other twelfth graders across the country.
- Emphasize to your students the importance of showing the country what twelfth grade students know and can do.

### **Frequently Asked Questions About NAEP**

#### What is NAEP?

The National Assessment of Educational Progress, often called the "Nation's Report Card," is the only measure of student achievement in the United States that you can use to compare the performance of students in your state with the performance of students across the nation or in other states.

#### Do the NAEP assessments replace the state assessments?

No. NAEP and state assessments measure different constructs but work together to provide information on student performance.

#### What are the goals of NAEP?

NAEP has two major goals: to compare student achievement in states and other jurisdictions and to track changes in achievement of fourth-, eighth-, and twelfthgraders over time in mathematics, reading, writing, science, history, and other content domains.

#### What does NAEP assess and how is the content determined?

A subject-specific content framework, developed by the National Assessment Governing Board (NAGB), guides each assessment. The frameworks are available at <a href="https://www.nagb.org">www.nagb.org</a>, and they include a range of subject-specific content and thinking skills needed by students to deal with the complex issues they encounter inside and outside their classrooms.

#### Can my school get school-level or individual student-level results?

No. The Nation's Report Card provides data for large groups of students. Typically, state, regional, and national results are reported for grades 4 and 8. At grade 12, only national and regional results are reported.

#### Why should students participate in NAEP?

The participation of each student selected is important to the success of the Nation's Report Card because only a representative sample will allow the assessment to provide fair, accurate, and useful information on student achievement. Each student represents many other students in his or her state.

#### How can teachers prepare their students for NAEP?

Special preparation is not necessary or expected. You can encourage your students to come to school well-rested and to try their best on assessment day.

**52** 

Percent of twelfth-graders who agreed or strongly agreed with the statement, "I am good at mathematics."

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#### **NAEP** in the News

Recently, news media, research groups, and teacher advocacy organizations have focused on educational assessment and accountability.

**Because NAEP is the only** assessment that uses a nationally representative sample, many articles and research reports cite NAEP data. These articles and reports are varied in their perspective and focus. Some articles compare other assessment results to NAEP; others focus on the trend data that NAEP provides. Researchers are able to track student performance over time and across the country. Below is a sampling of reports and articles which reference NAEP.

- The New York Times published "Young Students Post Solid Gains in Federal Tests" about the release of the NAEP Long-Term Trend reading and mathematics results.
- The National Education Association cited NAEP results as a confirmation of No Child Left Behind testing. This article offers key questions for teachers to consider when analyzing NAEP State results.
- The Wall Street Journal published a story, "How Charlotte Tops Big Cities in School Tests," with an analysis of the results from the NAEP 2005 Trial Urban District Assessment.

• The National Council of Teachers of Mathematics included an article on their website that explained to mathematics teachers the differences between NAEP Long-Term Trend, National, and State assessments. The article explained differences in the content of the assessments, the skills tested, and the results obtained.

As educational accountability continues to dominate education news, one thing remains a constant: NAEP data will continue to be referenced in assessment articles.